

June 29 - July 5, 2001

The Terra spacecraft is operating in nominal mode. All instruments are in nominal science mode.

The MODIS instrument was powered up with Power Supply 1 and Command Processor A at about 5 p.m. local time on July 2, 2001, after starting up into low power mode using Command Processor B earlier in the afternoon of July 2. According to the recovery plan, the scenario was to come up and remain on Power Supply 1 and Command Processor B if a stable low power configuration could be maintained. The instrument was stable in this configuration for several minutes, after which Command Processor B went back down. According to plan, the configuration was then changed to come back up into low power mode on Power Supply 1 with Command Processor A. Shortly after coming back up into this configuration (low power mode on Power Supply 1 and Command Processor A), the Terra Flight Operations Team (at the direction of the MODIS Anomaly Resolution Team) commanded the MODIS instrument back into Science Mode on the A-side. This process included uplinking the MODIS Data Formatter anomaly patches developed to handle the Data Formatter anomaly in August of 2000.

MODIS telemetry is being closely monitored and the instrument appears to be behaving normally. Detector performance was characterized over the last few days via Level 1a data and analysis of X-band data downlinked via the Terra Direct Broadcast System. All indications are that the A-side detectors are behaving as expected per previous operations on that side.

The MOPITT A-side detector system (channels 5-8) achieved temperature control at about the nominal point of pre-fault operation at approximately 3 p.m. local time on July 5. The B-side (channels 1-4) is still non-operational. The MOPITT team must now examine the science data, but all appears to be well.

There is some increased vibration in the system due to the mode of operation. The Earth Science Mission Operations Project has alerted the MISR and ASTER teams so that they can review their data for signs of jitter. The spacecraft data have not shown anything significant. MOPITT has seen some increased vibration on its internal sensors, but not enough that instrument or other spacecraft effects should be seen. The next actions are to ensure that the A-side is correctly set-up and to perform a long calibration on channels 6 and 8.

The Solid State Recorder (SSR) operations have been nominal. Work is continuing on the final report from the SSR anomaly in June.

The ASTER Shortwave Infrared (SWIR) Temperature analysis and adjustment effort is ongoing. SWIR heaters 3 and 4 were turned off on June 20 and the SWIR Capillary Pumped Heat Transport System set point will be incrementally lowered by 4.5 degrees starting on or about July 24. The SWIR temperatures are being driven by the fact that the instrument is being left on rather than periodically cycled as originally planned.